

Remarks

The present application was filed on June 28, 2001. This Amendment is responsive to the Office Action mailed May 26, 2004. The Office Action of May 26, 2004 rejected claims 1-3, 5-12, 14-22 and 24-27. In response, the Applicant has herein amended claims 1, 6-11, 15-18, 20, 21, and 25-27. These amendments replace the term "wedge(s)" with the term "burst(s)" to more particularly point out and distinctly claim the patentable subject matter of the present invention. These amendments are proper, do not introduce new matter, are not narrowing in view of a prior art rejection, and place the application in proper condition for reconsideration.

Rejection of Claims Under 35 U.S.C. §112 First Paragraph

Claims 1-3, 5-12, 14-18, 20-22, and 24-27 were rejected as allegedly lacking enablement. This rejection is respectfully traversed.

The Applicant acknowledges the Examiner's distinction, in the illustrative embodiments, between the "servo burst" which is written in one pass, and the "servo wedge" which is written in two passes.

However, a reasonable meaning of "writing two or more servo wedges" includes writing a "first portion" or a "second portion" of the servo wedges. The "writing" step involves a continuous process of trimming, and perhaps stitching, adjacent servo bursts. In other words, nothing in the disclosure or claim language, or in the view of a skilled artisan, would limit "writing two or more servo wedges" to only mean writing complete servo wedges in one pass. Under such an erroneous construction, neither the first pass nor the second pass in writing an AB servo wedge could be included in the definition of "writing a servo wedge" because neither, in and of itself, resulted in the complete AB servo wedge.

Said in yet other words, each servo wedge has a portion in one track and a portion in an adjacent track. A reasonable construction of the term "writing two or more servo wedges" means writing the servo wedge in its entirety to the extent that the write element can do so in the current radial position. Presently, the write element writes the entire portion of two or more servo wedges, to the extent the radial position of the write element permits, for every servo wedge read by the read element.

The present rejection is based on a technicality rather than a reasonable construction of the claim language. There is ample support and enablement in the specification for the claimed subject matter. For example, without limitation:

One revolution is all that is required to write both servo wedges 320, 322 and the fourth radially continuous servo wedge 325 for all sectors of a track because the reader 308 reads the third wedge 324, which is positioned at the head 118 at a time other than when the first and second wedges 320, 322 and the fourth radially continuous wedge 325 are positioned at the head 118. Thus, for every switch from a read operation to a write operation, at least two wedges plus the radially continuous fourth wedge 325 are written rather than just one wedge.

(specification pg. 8, lines 7-13, emphasis added)

Query operation 226 detects whether all sectors have been written to in the first and third wedge positions 320, 324 and in the fourth radially continuous position. Again, writing these wedges for all sectors of a track should take no more than one revolution.

(specification, pg. 9, lines 29-31, emphasis added)

Nevertheless, in order to facilitate prosecution on the merits, the Applicant has amended the language of claims 1, 6-11, 15-18, 20, 21, and 25-27 solely to more particularly point out and distinctly claim that the write element writes servo burst portions of the servo wedges during each revolution of the disc. This amendment obviates the present rejection, and reconsideration and withdrawal of the rejection of the amended claims and those claims depending therefrom are respectfully requested.

Rejection of Claims Under 35 U.S.C. §102(e)

Claim 19 was rejected as being anticipated by Erlich '107. This rejection is respectfully traversed because Erlich '107 does not disclose the recited feature "*means for writing servo wedges....*"

Claim 19 is written in accordance with 35 U.S.C. §112, sixth paragraph. The Applicant has identified the function associated with the recited "means" element as being the reading and writing of servo burst information by a head, wherein the head has a read element that is radially offset from a write element, and wherein the write element writes two or more servo bursts, or portions thereof, for every reading operation of the read element. Accordingly, the disclosed structure performing this function includes the write element 306, the read element 308, and programmed instructions for performing the

propagation step 170 of FIG. 3 which, in some embodiments, comprises the process steps illustrated in FIGS. 4A-4C. As disclosed, the programmed instructions can be resident in any of a number of places within the control system, such as without limitation the read/write channel 146, the processor 142, or the memory 143.

The Examiner is obliged as a matter of law to construe this means element as this structure, and equivalents thereof. See *B. Braun Medical, Inc. v. Abbott Lab.*, 43 USPQ2d 1896, 1900 (Fed. Cir. 1997); *In re Donaldson Co. Inc.*, 26 USPQ2d 1845 (Fed. Cir. 1994)(*en banc*); *In re Dossel*, 42 USPQ2d 1881 (Fed. Cir. 1997); *Supplemental Examination Guidelines for Determining the Applicability of 35 U.S.C. 112, Para. 6*, 65 FR 38510. Failure to do so constitutes reversible error.

The present rejection is based (from the 12/18/03 office action) on a construction of the “means for writing servo wedges” that encompasses only the offset read and write elements of the head: “The claimed means for writing is interpreted as the head comprised of the head [sic] and write elements as taught by Ehrlich et al.” (Office Action of 12/18/2003, pg. 3).

The Examiner’s construction of this means-plus-function claim is erroneous in that it completely ignores the structure intrinsically related to the function performed by the offset head of the present invention. Particularly, the Applicant expressly traverses the Examiner’s assertion: “The argued limitation of “during less than one revolution” is not set forth in claim 19.” (Office Action of 5/26/2004, pg. 3). This limitation is explicitly contemplated in the illustrative embodiments of the propagation process of FIGS. 4A-4C. For example, the FOLLOW SERVO WEDGE 3 step 202 is immediately followed by WRITE SERVO WEDGES 1, 2, AND 4 step 206. A portion of the accompanying detailed description states:

One revolution is all that is required to write both servo wedges 320, 322 and the fourth radially continuous servo wedge 325 for all sectors of a track because the reader 308 reads the third wedge 324, which is positioned at the head 118 at a time other than when the first and second wedges 320, 322 and the fourth radially continuous wedge 325 are positioned at the head 118. Thus, for every switch from a read operation to a write operation, at least two wedges plus the radially continuous fourth wedge 325 are written rather than just one wedge.

Similarly, the FOLLOW SERVO WEDGE 2 step 220 is immediately followed by WRITE SERVO WEDGES 3, 4, AND 1 step 224. A portion of the accompanying detailed description states:

Query operation 226 detects whether all sectors have been written to in the first and third wedge positions 320, 324 and in the fourth radially continuous position. Again, writing these wedges for all sectors of a track should take no more than one revolution.

(Specification, pg. 9, lines 29-31, emphasis added).

Similarly, the FOLLOW SERVO WEDGE 1 step 238 is immediately followed by WRITE SERVO WEDGES 2, 3, AND 4 step 242. A portion of the accompanying detailed description states:

Once the inner diameter is reached, all tracks have at least one complete and radially continuous servo wedge in the fourth wedge position 325 propagated per sector, and the total number of revolutions required equals the total number of tracks upon which the servo wedges were propagated.

(Specification pg. 11, lines 9-12, emphasis added)

When this means element is properly construed, it is clear that the cited references, taken as a whole, fail to disclose this element. Accordingly, the rejection of claim 19 under Section 102 is erroneous as a matter of law and the Applicant requests reconsideration and withdrawal of the rejection of claim 19 and the claims depending therefrom.

Objection to Claims 26 and 27

The Examiner objected to the lack of an explicit statement in the Amendment of 3/11/2004 as to the patentability of new claims 26 and 27 over the cited references. The Applicant argued extensively that the language of other claims, such as the term "an instance," when properly construed means "during less than one revolution." These new claims explicitly set forth this feature in terms of "writing two or more servo bursts (now amended to "wedges")...during less than one revolution of the media..." The Applicant believes the remarks, taken as a whole, provided a fully responsive Amendment satisfying 37 CFR 1.111, albeit implicitly set forth.

References Not Relyed On

The Applicant gratefully acknowledges the Examiner's admonition that although not currently asserted, the previously cited Kroumbi '620 reference could possibly be asserted as the basis for a rejection in view of the present amendments. The Applicant believes the claims are patentable over all the art of record. With respect to the Kroumbi '620 reference, for example without limitation, all the independent claims of the present invention recite writing two or more servo bursts within one sector during an instance of the sector passing by the head, or during less than one revolution of the disc.

Contrarily, Kroumbi '620 discloses a one-to-one relationship between reading a servo burst and writing a corresponding servo burst. Particularly, Kroumbi '620 discloses reading the A bursts and correspondingly writing the B bursts during a first disc revolution, and then reading the B bursts and correspondingly writing the A bursts during a second disc revolution (Kroumbi '620, for example col. 7 lines 11-49).

Conclusion

This is a complete response to the Office Action mailed May 26, 2004. The Applicant respectfully requests that the Examiner enter the above amendments, reconsider the application and allow all of the pending claims. The Examiner is invited to contact the below signed Attorney should any questions arise concerning this response.

Respectfully submitted,

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